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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,245	07/31/2003	Hugh E. McLoone	003797.00542	1614
28319	7590	05/12/2004	EXAMINER	
BANNER & WITCOFF LTD., ATTORNEYS FOR MICROSOFT 1001 G STREET, N.W. ELEVENTH STREET WASHINGTON, DC 20001-4597			COLILLA, DANIEL JAMES	
			ART UNIT	PAPER NUMBER
			2854	
DATE MAILED: 05/12/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/631,245

**Applicant(s)**

MCLOONE, HUGH E.

**Examiner**

Dan Colilla

**Art Unit**

2854

*PCW*

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20030731</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims, 5, 10, 11 and 25 are objected to because of the following informalities:

In claims 5, 10 and 11, the term “said keys” is unclear because two different groups of keys have previously been recited.

In claim 25, there appears to be language missing in the phrase, “in the keyboard housing includes is foldable.”

Appropriate correction is required.

2. Claims 21-22 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In claims 21-22, the invention is directed towards a wireless remote control. However, applicant does not recite any structure to further limit the remote control in these claims, instead, applicant recites what type of keyboard is to be used with the remote control.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-4, 6, 9, 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato (JP 10-207605).

With respect to claim 1, Kato discloses wireless computer keyboard including a keyboard housing 20, a keyboard processor (inherent in the keyboard in order to receive input from an operator and send out a signal), an alphanumeric section (keys 21) and a remote control portion 30 disposed laterally to the alphanumeric section; the remote control section having a set of keys 32 as shown in Figures 1-2 of Kato.

With respect to claim 2, Figures 1-2 of Kato shows the remote control section 30 being removably coupleable with the keyboard housing.

With respect to claim 3, the remote control portion 30 is mateable with the keyboard housing as show in Figure 1 of Kato, and the remote control portion is mateable with the processor through infrared light emitting device 25 and photodetector 35 as shown in Figure 2 of Kato.

With respect to claim 4, while not explicitly mentioned, the remote control disclosed by Kato must include a control processor in order to process the input from keys 32 and send the data as a signal from transmitting part 31.

With respect to claim 6, Kato discloses a groove as shown in Figure 2 for receiving the remote control portion 30.

With respect to claim 9, Kato discloses that the remote control portion 30 abuts the keyboard on a right side and a bottom side of the remote control portion 30 as shown in Figures 1-2 of Kato.

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With respect to claim 12, Kato discloses a computer keyboard 10, with alphanumeric keys 21, a keyboard housing 20 and a receiving portion shown on the right side of the keyboard in Figure 2 of Kato.

With respect to claim 15, the receiving portion is a groove as shown in Figure 2 of Kato.

5. Claims 12-13 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsumi Electric Co. (JP 11-312044, hereafter Mitsumi).

With respect to claim 12, Mitsumi discloses a computer keyboard including a group of alphanumeric keys 12a, a keyboard housing 11 and a receiving portion 14 which is adapted to receive a remote control body 20 as shown in Figures 1-4 of Mitsumi.

With respect to claim 13, the receiving portion 14 is a recess as shown in Figures 2 and 4 of Mitsumi.

With respect to claim 18, Mitsumi discloses that the receiving portion 14 is disposed on a right side of the keyboard housing as shown in Figure 1 of Mitsumi.

6. Claims 12, 14, 16-17, 19-20 and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Oka.

With respect to claim 12, Oka discloses a computer keyboard 11 including a group of alphanumeric keys 11a and 11b as shown in Figure 1 of Oka, a keyboard housing also shown in Figure 1, and a receiving portion 15 for receiving a remote control body 16 as shown in Figures 1-2 of Oka.

With respect to claim 14, the receiving portion 15 is a slot disposed laterally from the group of alphanumeric keys 11a and 11b.

With respect to claims 16-17, Oka discloses electrical connectors 13 and 19 in the keyboard and remote control body, respectively, as shown in Figures 2-3 of Oka.

With respect to claim 19, Oka discloses a wireless remote control 16, including circuitry as shown in Figure 7 of Oka, a plurality of keys 17 connected to the circuitry and a body that encloses the circuitry as shown in Figure 2 of Oka. Oka further discloses a protrusion adapted to removably coupled with a host device 11 as shown in the upper-left side of the remote control 16 in Figure 4 of Oka.

With respect to claim 20, Oka discloses a control portion 45 as shown in Figure 7 of Oka for connecting to the circuitry of the remote control 16 and keyboard 11.

With respect to claims 21-22, since applicant has not recited any further structure of the remote control in these claims they are rejected along with their parent claims.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 5, 7-8, 10-11 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka (US 5,049,863) in view of Watanabe (US 6,593,859).

With respect to claim 1, Oka discloses the claimed keyboard except that it is not wireless. Oka discloses a keyboard 11 with a keyboard housing as shown in Figures 1-2, a keyboard processor as shown in Figure 6, a group of alphanumeric keys 11a and 11b, and a remote control

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portion 16 with a set of keys 17 disposed laterally of the alphanumeric section 11a, 11b. The keys 17 are in electrical communication with the keyboard 11 through connectors 13 and 19 as shown in Figures 2 and 3 of Oka. Watanabe teaches a keyboard 300 that is in wireless communication with a computer 100,200 through transmitter 301 and receiver 102 as shown in Figure 1 of Watanabe. It would have been obvious to combine the teaching of Watanabe with the keyboard disclosed by Oka for the advantage of a keyboard that can be moved freely without the restrictions of a wire.

With respect to claim 2, the remote control portion 16 is removably coupleable to the keyboard housing as shown in Figure 2 of Oka.

With respect to claim 3, the remote control portion is mateable with the keyboard housing as shown in Figure 2 of Oka and with the keyboard processor as described in col. 3, lines 24-34 of Oka.

With respect to claim 5, the remote control processor disclosed by Oka has a control processor that transfers keyed input into the keyboard 11 as shown in Figure 7 of Oka.

With respect to claim 7, Oka discloses a receiving slot 15 for attaching the remote control portion 16.

With respect to claim 8, Oka discloses mating case members as shown in Figure 4 through which the remote control portion 16 is attached to the keyboard 11.

With respect to claims 10-11, Oka discloses a processor for the remote control portion 16 as shown in Figure 7 of Oka, and Oka discloses transferring the input information from the remote control portion 16 to the keyboard processor as described in col. 3, lines 24-34 of Oka.

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With respect to claim 23, Oka discloses the claimed keyboard except that it is not wireless. Oka discloses a keyboard 11 with a keyboard housing as shown in Figures 1-2, a keyboard processor as shown in Figure 6, a group of alphanumeric keys 11a and 11b, and a remote control processor 16 with a set of keys 17 disposed laterally of the alphanumeric section 11a, 11b. Figure 1 of Oka shows the remote control processor in an abutting relation on four sides with the keyboard 11. Watanabe teaches a keyboard 300 that is in wireless communication with a computer 100,200 through transmitter 301 and receiver 102 as shown in Figure 1 of Watanabe. It would have been obvious to combine the teaching of Watanabe with the keyboard disclosed by Oka for the advantage of a keyboard that can be moved freely without the restrictions of a wire.

With respect to claim 24, Oka discloses a recess 15 for receiving the remote control body 16.

9. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka (US 5,049,863) in view of Watanabe (US 6,593,859) as applied to claims 1-3, 7-8, 10-11 and 23-24 above, and further in view of Lee (US 5,574,481).

With respect to claim 25, Oka and Watanabe discloses the claimed keyboard except for the keyboard being foldable. However, Lee teaches a keyboard that is foldable as shown in Figures 1, 7 and 9 of Lee. The keyboard includes mating housing members 13 and 14. It would have been obvious to combine the teaching of Lee with the keyboard disclosed by Oka in view of Watanabe for the advantage of allowing the operator to adjust the position of the keyboard to a comfortable typing position (Oka, col. 1, lines 17-20).



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With respect to claim 26, Oka and Watanabe discloses the claimed keyboard except for the keyboard being foldable. However, Lee teaches a keyboard that is foldable as shown in Figures 1, 7 and 9 of Lee. The keyboard includes mating housing members 13 and 14 and a hinge shown at the bottom portion of member 26 in Figure 7 of Lee. It would have been obvious to combine the teaching of Lee with the keyboard disclosed by Oka in view of Watanabe for the advantage of allowing the operator to adjust the position of the keyboard to a comfortable typing position (Oka, col. 1, lines 17-20).

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Karidis, Kumar and Kumagai are cited to show other examples of keyboards with remote control portions.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (571)272-2157. The examiner can normally be reached Tues.-Fri. between 7:30 am and 6:00 pm. Faxes regarding this application can be sent to (703)872 - 9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (571)272-2168. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 4, 2004

A handwritten signature in black ink, appearing to read "Daniel J. Colilla".

Daniel J. Colilla  
Primary Examiner  
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